removing at least one unnecessary line segment from said framework which is identified based on said evaluation of said degree of importance of each line segment; and

determining a position of a vertex after said unnecessary line segment is removed.

21. (new) The method of claim 20, wherein said image data defines a 3-dimensional polygonal framework.

22. (new) The method of claim 20, wherein said evaluating a degree of importance of each line segment is performed by evaluating an amount by which a volume of the polygonal framework defined by the image data is changed by removal of a particular line segment.

23. (new) The method of claim 22, wherein said evaluating a degree of importance of each line segment further comprises assigning a line segment a degree of importance in direct proportion to the amount of volume change caused by removal of that line segment.

24. (new) The method of claim 20, wherein said evaluating a degree of importance of each line segment is performed using a vector (E) which represents a particular

line segment, an area (A) of a polygon within said polygonal framework wherein said particular line segment is a side of said polygon, and a vector (N) normal to a plane of said polygon.

25. (new) The method of claim 24, wherein said evaluating a degree of importance of each line segment further comprises calculating an importance of a particular line segment by $(N \bullet E) \times A$,

wherein E is said vector representing a particular line segment, A is said area of a polygon sided by said particular line segment, and N is said normal vector.

26. (new) The method of claim 20, wherein said evaluating a degree of importance of each line segment is performed based on an amount by which an area of said polygonal framework defined by said image data is changed by removal of a particular line segment.

27. (new) The method of claim 26, wherein said evaluating a degree of importance of each line segment further comprises assigning a degree of importance to a particular line segment in direct proportion to said amount by which said

area of said polygonal framework is changed by removal of that line segment.

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28. (new) The method of claim 26, 1 wherein said evaluating a degree of importance of each line segment is performed based on a length of a particular line segment and an area of a polygon within said polygonal framework of which said particular line segment is a side.

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29. (new) The method of claim 28, wherein said evaluating a degree of importance of each line segment further comprises calculating a sum of results of an equation $|E| \times A$ for polygons sided by said particular line segment, wherein "$|E|$" is length of that line segment, "A" is an area of a polygon sided by said particular line segment.

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30. (new) The method of claim 26, wherein said evaluating a degree of importance of each line segment is performed based on a length of said line segments.

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31. (new) The method of claim 30, wherein said evaluating a degree of importance of said line segments further comprises assigning a degree of importance to each

line segment in direct proportion to a length of that line segment.

32. (new) The method of claim 20, wherein if two or more line segments are assigned an identical degree of importance, said method further comprises assigning a lowest degree of importance among said two or more line segments to that line segment of said two or more line segments with a shortest length.

33. (new) The method of claim 20, further comprising repeating said steps of evaluating a degree of importance of each line segment; removing an unnecessary line segment; and determining a position of a vertex after said unnecessary line segment is removed.

34. (new) The method of claim 20, wherein said evaluating a degree of importance of each line segment is performed based on an amount by which an amount of said image data is changed by removal of a particular line segment.

35. (new) The method of claim 20, wherein said evaluating a degree of importance of each line segment is

performed based on importance values assigned by a user to one or more of said line segments.

36. (new) The method of claim 35, further comprising specifying one or more of said line segments as of high importance, wherein said evaluating a degree of importance of each line segment further comprises preventing said one or more high importance line segments from being designated as said unnecessary line segment.

37. (new) The method of claim 20, wherein said determining a position of a vertex after said unnecessary line segment is removed comprises positioning a vertex at a position such that a total loss of area between a framework including said unnecessary line and a framework in which said unnecessary line segment is removed is minimized.

38. (new) The method of claim 20, wherein said determining a position of a vertex after said unnecessary line segment is removed comprises positioning a vertex at a position such that a loss of area to said framework caused by removal of said unnecessary line segment is approximately equal for portions of said framework on opposite sides of said vertex.

39. (new) The method of claim 20, wherein said determining a position of a vertex after said unnecessary line segment is removed comprises positioning said vertex at a position corresponding to an end of said removed unnecessary line segment.

40. (new) The method of claim 20 further comprising, generating an intermediate configuration of said image data by decreasing a length of said unnecessary line segment prior to said step of removing said unnecessary line segment.

41. (new) The method of claim 20 further comprising, generating an intermediate polygonal framework between an original framework including said unnecessary line segment and a new framework with said unnecessary line segment removed.

42. (new) The method of claim 41, wherein said generating an intermediate framework comprises locating a vertex an a position intermediate to a vertex position in said original framework and a vertex position determined in said step of determining a position of a vertex after said unnecessary line segment is removed.

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43. (new) The method of claim 42, wherein said locating a vertex at an intermediate position comprises using a linear interpolation on said vertex position in said original framework and said vertex position determined in said step of determining a position of a vertex after said unnecessary line segment is removed.

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44. (new) The method of claim 20, further comprising reconfiguring a texture applied to said framework to account for said removing of said unnecessary line segment.

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45. (new) The method of claim 20, wherein said evaluation of a degree of importance of each line segment is based in part on an evaluation of the degree of importance of line segments contiguous to a particular line segment being evaluated.

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46. (new) The method of claim 20, further comprising reconfiguring said framework after said unnecessary line segment has been removed by placing a new vertex at said position identified in said step of determining a position of a vertex.

47. (new) The method of claim 46, wherein said reconfiguring comprises using said new vertex to replace a previous vertex located at an end of said unnecessary, removed line segment.

48. (new) A method of approximating an image by decreasing an amount of image data used to create the image, wherein said image data defines a polygonal framework, said framework being composed of line segments drawn between vertices, said method comprising:

assigning an importance value to each line segment of said framework;

removing from said framework that line segment having a lowest importance value; and

reconfiguring said framework to account for said removal of said line segment having said lowest importance value.

49. (new) The method of claim 48, wherein said reconfiguring further comprises replacing two vertices of said framework, between which said removed line segment had been connected, with a single new vertex.

50. (new) The method of claim 48, wherein said image data defines a 3-dimensional polygonal framework.

51. (new) The method of claim 48, wherein said assigning an importance value to each line segment is performed by evaluating an amount by which a volume of the polygonal framework defined by the image data is changed by removal of a particular line segment.

52. (new) The method of claim 51, wherein said assigning an importance value to each line segment further comprises assigning a line segment an importance value in direct proportion to the amount of volume change caused by removal of that line segment.

53. (new) The method of claim 48, wherein said assigning an importance value to each line segment is performed using a vector (E) which represents a particular line segment, an area (A) of a polygon within said polygonal framework, wherein said particular line segment is a side of said polygon, and a vector (N) normal to a plane of said polygon.

54. (new) The method of claim 53,

wherein said assigning an importance value to each line segment further comprises calculating an importance of a particular line segment by $(N \bullet E) \times A$,

wherein E is said vector representing a particular line segment, A is said area of a polygon sided by said particular line segment, and N is said normal vector.

55. (new) The method of claim 48, wherein said assigning an importance value to each line segment is performed based on an amount by which an area of said polygonal framework defined by said image data is changed by removal of a particular line segment.

56. (new) The method of claim 55, wherein said assigning an importance value to each line segment further comprises assigning an importance value to a particular line segment in direct proportion to said amount by which said area of said polygonal framework is changed by removal of that line segment.

57. (new) The method of claim 48, wherein said assigning an importance value to each line segment is performed based on a length of a particular line segment and

an area of a polygon within said polygonal framework of which said particular line segment is a side.

58. (new) The method of claim 57, wherein said assigning an importance value to each line segment further comprises calculating a sum of results of an equation $|E| \times A$ for polygons sided by said particular line segment, wherein "$|E|$" is length of that line segment, "A" is an area of a polygon sided by said particular line segment.

59. (new) The method of claim 48, wherein said assigning an importance value to each line segment is performed based on a length of said line segments.

60. (new) The method of claim 59, wherein said assigning an importance value to each of said line segments further comprises assigning an importance value to each line segment in direct proportion to a length of that line segment.

61. (new) The method of claim 48, wherein if two or more line segments are assigned an identical degree of importance, said method further comprises assigning a lowest degree of importance among said two or more line segments to

that line segment of said two or more line segments with a shortest length.

62. (new) The method of claim 48, further comprising repeating said steps of assigning an importance value to each line segment; removing that line segment with the lowest importance value; and reconfiguring said framework.

63. (new) The method of claim 48, wherein said assigning an importance value to each line segment is performed based on an amount by which an amount of said image data is changed by removal of a particular line segment.

64. (new) The method of claim 48, wherein said assigning an importance value to each line segment is performed based on importance values assigned by a user to one or more of said line segments.

65. (new) The method of claim 64, further comprising specifying one or more of said line segments as of high importance, wherein assigning an importance value to each line segment further comprises preventing said one or more high importance line segments from being removed.

66. (new) The method of claim 48, wherein said reconfiguring comprises positioning a new vertex at a position such that a total loss of area between a framework including said line segment having said lowest importance value and a framework comprising said new vertex and in which said lowest-importance-value line segment is removed is minimized.

67. (new) The method of claim 48, wherein said reconfiguring comprises positioning a vertex at a position such that a loss of area to said framework caused by removal of said lowest-importance-value line segment is approximately equal for portions of said framework on opposite sides of said vertex.

68. (new) The method of claim 48, wherein said reconfiguring comprises positioning a vertex at a position corresponding to an end of said removed lowest-importance-value line segment.

69. (new) The method of claim 48, further comprising, generating an intermediate configuration of said image data by decreasing a length of said lowest-importance-value line segment prior to said step of removing said lowest-importance-value line segment.

70. (new) The method of claim 48, further comprising, generating an intermediate polygonal framework between an original framework including said lowest-importance-value line segment and a new reconfigured framework with said lowest-importance-value line segment removed.

71. (new) The method of claim 41, wherein said generating an intermediate framework comprises locating a vertex an a position intermediate to a vertex position in said original framework and a new vertex position determined in said step of reconfiguring.

72. (new) The method of claim 71, wherein said locating a vertex at an intermediate position comprises using a linear interpolation on said vertex position in said original framework and said new vertex position determined in said step of reconfiguring.

73. (new) The method of claim 48, further comprising reconfiguring a texture applied to said framework to account for said removing of said lowest-importance-value line segment.

74. (new) The method of claim 48, wherein said assigning an importance value to each line segment is done in accordance with an assigned importance value of line segments contiguous to a particular line segment being evaluated.

75. (new) The method of claim 48, wherein said reconfiguring comprises using a new vertex to replace a previous vertex located at an end of said removed, lowest-importance-value line segment.

76. (new) A method of approximating an image by decreasing an amount of image data used to create the image, wherein said image data defines a polygonal framework formed of polygons to which textures or pictures are applied, said polygons of said framework being composed of line segments connected between vertices, said method comprising:

evaluating a degree of importance of each line segment of said framework;

removing an unnecessary line segment identified by said step of evaluating a degree of importance of each line segment;

reconfiguring said framework to account for said removal of said line segment; and

reconfiguring said textures or pictures applied to said framework to account for said removal of said line segment.

77. (new) The method of claim 76, wherein said reconfiguring the textures or pictures applied to the framework is preformed altering an association between a vertex of said unnecessary line segment and any of said textures or pictures.

78. (new) The method of claim 76, wherein:

said reconfiguring of said framework comprises replacing two vertices of said framework, between which said unnecessary, removed line segment had been connected, with a single new vertex; and

said reconfiguring the textures or pictures applied to the framework comprises determining a new position on said textures or pictures corresponding to a position of said single new vertex in said framework.

79. (new) The method of claim 78, wherein said reconfiguring of said textures or pictures applied to the framework comprises determining said new position by

interpolation between two points on the textures or pictures which correspond to the unnecessary line segment.

80. (new) The method of claim 79, wherein said interpolation is a linear interpolation.

81. (new) The method of claim 76, wherein said evaluating a degree of importance of each line segment of said framework further comprises preventing any line segment existing on an outline of any of said textures or pictures from being designated as said unnecessary line segment.

82. (new) The method of claim 76, wherein said evaluating a degree of importance of each line segment of said framework further comprises preventing any line segment, which exists on an outline of any of said textures or pictures from being designated as said unnecessary line segment if a change in an area of said texture or picture resulting from removal of that line segment exceeds a predetermined value.

83. (new) The method of claim 82, wherein said area change amount after the line segment removal is obtained on the basis of a calculation of sum of results of an equation $|(N \bullet E) \times L|$ at line segments corresponding to the boundary lines

of the texture or picture existing before and after the line segment to be removed, wherein "E" is representing that line segment, "L" is a length of line segment corresponding to the boundary lines of the texture or picture, "N" is a normal vector of said line segments, "•" is a inner product, and "x" is a product.

84. (new) The method of claim 76, wherein said image data defines a 3-dimensional polygonal framework.

85. (new) The method of claim 76, wherein said evaluating a degree of importance of each line segment is performed by evaluating an amount by which a volume of the polygonal framework defined by the image data is changed by removal of a particular line segment.

86. (new) The method of claim 85, wherein said evaluating a degree of importance of each line segment further comprises assigning a line segment a degree of importance in direct proportion to the amount of volume change caused by removal of that line segment.

87. (new) The method of claim 76, wherein said evaluating a degree of importance of each line segment is

performed using a vector (E) which represents a particular line segment, an area (A) of a polygon within said polygonal framework wherein said particular line segment is a side of said polygon, and a vector (N) normal to a plane of said polygon.

88. (new) The method of claim 87, wherein said evaluating a degree of importance of each line segment further comprises calculating an importance of a particular line segment by $(N \bullet E) \times A$,

wherein E is said vector representing a particular line segment, A is said area of a polygon sided by said particular line segment, and N is said normal vector.

89. (new) The method of claim 78 wherein said evaluating a degree of importance of each line segment is performed based on an amount by which an area of said polygonal framework defined by said image data is changed by removal of a particular line segment.

90. (new) The method of claim 89 wherein said evaluating a degree of importance of each line segment further comprises assigning a degree of importance to a particular line segment in direct proportion to said amount by which said

area of said polygonal framework is changed by removal of that line segment.

91. (new) The method of claim 76, wherein said evaluating a degree of importance of each line segment is performed based on a length of a particular line segment and an area of a polygon within said polygonal framework of which said particular line segment is a side.

92. (new) The method of claim 91, wherein said evaluating a degree of importance of each line segment further comprises calculating a sum of results of an equation $|E| \times A$ for polygons sided by said particular line segment, wherein "$|E|$" is length of that line segment, "A" is an area of a polygon sided by said particular line segment.

93. (new) The method of claim 76, wherein said evaluating a degree of importance of each line segment is performed based on a length of said line segments.

94. (new) The method of claim 93, wherein said evaluating a degree of importance of said line segments further comprises assigning a degree of importance to each

line segment in direct proportion to a length of that line segment.

96. (new) The method of claim 76, wherein if two or more line segments are assigned an identical degree of importance, said method further comprises assigning a lowest degree of importance among said two or more line segments to that line segment of said two or more line segments with a shortest length.

97. (new) The method of claim 76, further comprising repeating said steps of evaluating a degree of importance of each line segment; removing an unnecessary line segment; reconfiguring said framework; and reconfiguring said textures or pictures.

98. (new) The method of claim 76, wherein said evaluating a degree of importance of each line segment is performed based on an amount by which an amount of said image data is changed by removal of a particular line segment.

99. (new) The method of claim 76, wherein said evaluating a degree of importance of each line segment is

performed based on importance values assigned by a user to one or more of said line segments.

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99. (new) The method of claim 98, further comprising specifying one or more of said line segments as of high importance, wherein said evaluating a degree of importance of each line segment further comprises preventing said one or more high importance line segments from being designated as said unnecessary line segment.

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100. (new) The method of claim 76, wherein said reconfiguring said framework comprises positioning a vertex at a position such that a total loss of area between a framework including said unnecessary line and a framework in which said unnecessary line segment is removed is minimized.

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101. (new) The method of claim 76, wherein said reconfiguring said framework comprises positioning a vertex at a position such that a loss of area to said framework caused by removal of said unnecessary line segment is approximately equal for portions of said framework on opposite sides of said vertex.

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102. (new) The method of claim 76, wherein said reconfiguring said framework comprises positioning a new vertex at a position corresponding to an end of said removed unnecessary line segment.

103. (new) The method of claim 76, further comprising, generating an intermediate configuration of said image data by decreasing a length of said unnecessary line segment prior to said step of removing said unnecessary line segment.

104. (new) The method of claim 76, further comprising, generating an intermediate polygonal framework between an original framework including said unnecessary line segment and a new framework with said unnecessary line segment removed.

105. (new) The method of claim 104, wherein said generating an intermediate framework comprises locating a vertex an a position intermediate to a vertex position in said original framework and a vertex position determined in said step of determining a position of a vertex after said unnecessary line segment is removed.

106. (new) The method of claim 105, wherein said locating a vertex at an intermediate position comprises using

a linear interpolation on said vertex position in said original framework and said vertex position determined in said step of determining a position of a vertex after said unnecessary line segment is removed.

107. (new) The method of claim 76, wherein said evaluating a degree of importance of each line segment is based in part on an evaluation of a degree of importance of line segments contiguous to a particular line segment being evaluated.

108. (new) The method of claim 76, wherein said reconfiguring said framework comprises using a new vertex to replace a previous vertex located at an end of said unnecessary, removed line segment.

109. (new) A device for use with a display device that approximates an image by decreasing an amount of image data used to create the image, wherein said image data defines a polygonal framework, said framework being composed of line segments drawn between vertices, said device comprising:

a memory unit for storing said image data; and

a processor connected to said memory unit, wherein said processor is programmed to:

(a) assign an importance value to each line segment of said framework;

(b) remove from said framework that line segment having a lowest importance value; and

(c) reconfigure said framework to account for said removal of said line segment having said lowest importance value.

110. (new) The device of claim 109, further comprising an input device inputting said image data to said processor for storage in said memory unit.

111. (new) The device of claim 110, wherein said input device comprises a floppy disk drive.

112. (new) The device of claim 110, wherein said input device comprises a magneto-optical disk drive.

113. (new) The device of claim 109, further comprising a user input device for inputting data to said processor.

114. (new) The device of claim 113, wherein said user input device comprises a keyboard.

115. (new) The device of claim 109, wherein said processor is further programmed to reconfigure texture and pictures applied to said framework to account for removal of said line segment.

116. (new) The device of claim 109, said processor, in performing said reconfiguration of said framework, is programmed to replace two vertices of said framework, between which said removed line segment had been connected, with a single new vertex.

117. (new) The device of claim 109, wherein said image data defines a 3-dimensional polygonal framework.

118. (new) The device of claim 109, said processor, in performing said assignment of importance values, is programmed to evaluating an amount by which a volume of the polygonal framework defined by the image data is changed by removal of a particular line segment.

119. (new) The device of claim 118, said processor, in performing said assignment of importance values, is programmed to assign a line segment an importance value in direct

proportion to the amount of volume change caused by removal of that line segment.

120. (new) The device of claim 109, said processor, in performing said assignment of importance values, is programmed to use a vector (E) which represents a particular line segment, an area (A) of a polygon within said polygonal framework, wherein said particular line segment is a side of said polygon, and a vector (N) normal to a plane of said polygon.

121. (new) The device of claim 120,

wherein said processor assigns an importance value to each line segment by calculating an importance of a particular line segment by $(N \bullet E) \times A$,

wherein E is said vector representing a particular line segment, A is said area of a polygon sided by said particular line segment, and N is said normal vector.

122. (new) The device of claim 109, said processor, in performing said assignment of importance values, is programmed to determine an amount by which an area of said polygonal framework defined by said image data is changed by removal of a particular line segment.

123. (new) The device of claim 122, wherein said processor assigns an importance value to a particular line segment in direct proportion to said amount by which said area of said polygonal framework is changed by removal of that line segment.

124. (new) The device of claim 109, wherein said processor, in performing said assignment of importance values, assigns an importance value to each line segment based on a length of a particular line segment and an area of a polygon within said polygonal framework of which said particular line segment is a side.

125. (new) The device of claim 124, wherein said processor assigns an importance value to each line segment by calculating a sum of results of an equation $|E| \times A$ for polygons sided by said particular line segment, wherein "$|E|$" is length of that line segment, "A" is an area of a polygon sided by said particular line segment.

126. (new) The device of claim 109, wherein said processor, in performing said assignment of importance values,

is programmed to assign an importance value to each line segment based on a length of said line segments.

127. (new) The device of claim 126, wherein said processor assigns an importance value to each line segment in direct proportion to a length of that line segment.

128. (new) The device of claim 109, wherein if two or more line segments are assigned an identical degree of importance, said processor assigns a lowest degree of importance among said two or more line segments to that line segment of said two or more line segments with a shortest length.

129. (new) The device of claim 109, wherein said processor is further programmed to repeat said assignment of an importance value to each line segment; said removal of that line segment with the lowest importance value; and said reconfiguration said framework.

130. (new) The device of claim 109, wherein said processor is programmed to assign an importance value to each line segment based on an amount by which an amount of said image data is changed by removal of a particular line segment.

131. (new) The device of claim 109, wherein said processor is programmed to assign an importance value to each line segment based on importance values assigned by a user to one or more of said line segments.

132. (new) The device of claim 109, wherein said processor is programmed to reconfigure said framework by positioning a new vertex at a position such that a total loss of area between a framework including said line segment having said lowest importance value and a framework containing said new vertex and in which said lowest-importance-value line segment is removed is minimized.

133. (new) The device of claim 109, wherein said processor is programmed to reconfigure said framework by positioning a new vertex at a position such that a loss of area to said framework caused by removal of said lowest-importance-value line segment is approximately equal for portions of said framework on opposite sides of said new vertex.

134. (new) The device of claim 109, wherein said processor is programmed to reconfigure said framework by